AMENDMENTS TO THE CLAIMS

1-11.   (Cancelled)

12.   (Currently Amended) A computer-implemented system for managing a collection of mutually dependent information contents that are networked over the Web, said system comprising:

a collection of Web documents, which are a content net, that comes with computer-executable representations of dependency relationships among elements of the Web documents;

means for automatically propagating updates that are introduced in elements of the Web documents to all elements of the Web documents that depend on the updated elements;

a dependency structure analysis module operable to

given a set of updated activated elements, identify at least one of its update candidate set, which contains all active elements, and corresponding content variables, which depend on at least one of the active elements in the given set, and

determine at least one of the presence and absence of cyclic dependencies among active elements in the Web documents in the content net;

a station as at least one of a collection of ports and a port complex for interchanging information over the Web, said station being a browser-based presentation of a Web document representing information contents in a content net;

a station net, which is a collection of said stations that are networked over the Web and which is accessible to human users in the Web environment, wherein each said station in the collection is derived from a Web document representing information contents in a designated content net;

~~The computer-implemented system according to claim 11,~~ wherein said station comprises:

internal reference ports ~~for receiving~~ operable to receive information from sources within ~~the~~ said station net containing ~~this~~ said station;

- 3 -

external reference ports ~~for receiving~~<u>operable to receive</u> information from applications ~~such as~~<u>including</u> database applications outside ~~the~~<u>said</u> station net;

initial ports ~~for sending~~<u>operable to send</u> information to other ports within ~~the~~<u>said</u> station net containing ~~this~~<u>said</u> station; and

a local port ~~for keeping~~<u>operable to keep</u> information within ~~the~~<u>said</u> station for local use.

13.   (Currently Amended) The computer-implemented system according to claim 12, wherein <u>at least one of</u> said <u>external, initial and local</u> ports in said station are equipped with<u> at least one of</u>:

control functions for update propagation within ~~the~~<u>said</u> entire station net;

control functions for importing information from external applications ~~such as~~<u>including</u> database applications;

control functions for exporting information to external applications; ~~or~~<u>and</u>

control functions <u>which are</u> obtained by <u>at least</u> sequential or concurrent compositions of said control functions above.

14.   (Currently Amended) The computer-implemented system according to claim 13, wherein ~~said~~<u>the</u> control functions can operate in <u>at least one</u>:

<u>an</u> operator control mode in which ~~said~~<u>the</u> control functions are initiated by human users; ~~or~~<u>and</u>

<u>a</u> program control mode in which ~~said~~<u>the</u> control functions are initiated by computer programs.

15.   (Currently Amended) The computer-implemented system according to claim 12, wherein <u>at least one of</u> content variables~~, or~~ <u>and</u> corresponding elements~~,~~ of a content file map to ports of ~~the~~<u>said</u> station corresponding to the content file <u>by</u> respecting the following constraints:

~~an~~<u>at least one of said</u> internal reference port<u>s</u> is associated with a set of content variables which depend on other content variables via functional dependency clauses;

~~an~~<u>at least one of said</u> initial port<u>s</u> is associated with a set of free variables;

- 4 -

an at least one of said external reference ports is associated with a single free variable; and

a said local port is associated with the set of all non-active elements which are not sub-elements of an active element.

16.   (Currently Amended) The computer-implemented system according to claim 15, wherein for each a layout of each said station, its layout is specified in a Web-standard language such as including XSL (Extensible Style Language) separately from the content file of the said station.

17-25. (Cancelled)

26.   (Currently Amended) The computer-implemented system according to claim 13, wherein at least one content variables, or and corresponding elements, of a content file map to ports of the said station corresponding to the content file by respecting the following constraints:

an at least one of said internal reference ports is associated with a set of content variables which depend on other content variables via functional dependency clauses;

an at least one of said initial ports is associated with a set of free variables;

an at least one of said external reference ports is associated with a single free variable; and

a said local port is associated with the set of all non-active elements which are not sub-elements of an active element.

27.   (Currently Amended) The computer-implemented system according to claim 14, wherein at least one content variables, or and corresponding elements, of a content file map to ports of the said station corresponding to the content file by respecting the following constraints:

an at least one of said internal reference ports is associated with a set of content variables which depend on other content variables via functional dependency clauses;

an at least one of said initial ports is associated with a set of free variables;

an at least one of said external reference ports is associated with a single free variable; and

a said local port is associated with the set of all non-active elements which are not sub-elements of an active element.